

NATIONAL ENERGY ISSUES

HEARING
before the
COMMITTEE ON
ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE

ONE HUNDRED SEVENTH CONGRESS

FIRST SESSION

TO RECEIVE TESTIMONY ON PROPOSALS RELATED TO REMOVING BARRIERS
TO DISTRIBUTED GENERATION, RENEWABLE ENERGY AND OTHER
ADVANCED TECHNOLOGIES IN ELECTRICITY GENERATION AND
TRANSMISSION, INCLUDING SECTION 301 AND TITLE VI OF S. 597, THE
COMPREHENSIVE AND BALANCED ENERGY POLICY ACT OF 2001; SECTIONS
110, 111, 112, 710, AND 711 OF S. 388, THE NATIONAL ENERGY SECURITY ACT
OF 2001; AND S. 933, THE COMBINED HEAT AND POWER ADVANCEMENT
ACT OF 2001 AND TO RECEIVE TESTIMONY ON PROPOSALS RELATING TO
THE HYDROELECTRIC RELICENSING PROCEDURES OF THE FEDERAL
ENERGY REGULATORY COMMISSION, INCLUDING TITLE VII OF S. 388,
TITLE VII OF S. 597; AND S. 71, THE HYDROELECTRIC LICENSING PROCESS
IMPROVEMENT ACT OF 2001

PROPOSALS RELATED TO GLOBAL CLIMATE CHANGE

COMPREHENSIVE ELECTRICITY RESTRUCTURING

JULY 19, 2001

JULY 24, 2001

JULY 25, 2001

JULY 26, 2001

PART 3

The Chairman. Thank you very much.
Senator Carper.

Senator Carper. Welcome. Thanks for joining us today. I am a new member of the committee. Some of these folks have been here for years; I have been here for days. And some of what you talked about, frankly, I do not fully understand. And I am going to ask us to go back, a couple of you, and ask you to give me a primer on some of what you have been taking about.

Mr. Boyd, I missed your testimony entirely. I have another committee that is meeting at the same time. Could you just start off by taking a minute or so and just tell me, among the things that you said, I know a lot was important, but just hit me with some of the highlights, please.

Mr. Boyd. Well, the wind is the fastest growing renewable technology in the world today. And that is primarily because the price has been driven down so it is as close to being competitive with other generation technologies. The growth that we will see will probably double, almost double, in the United States this year. Over the next 5 years, we will see about \$40,000 megawatts go in around the world. Europe is much farther ahead in terms of deploying wind energy than we are here in the United States.

Senator Carper. Why is that?

Mr. Boyd. Because they have given a lot of incentives to wind energy. Germany, for example, has what they call a feed law. They pay 90 percent of the retail rate to people to put in wind. Other countries have different types, but pretty good incentive programs.

They have decided that wind is a technology that they want to supply. I think in the case of Denmark now they are about 20 percent is wind energy.

Senator Carper. What kind of potential do you see in our country for utilizing wind energy?

Mr. Boyd. Well, it is unlimited. I mean, in terms of resource, we could easily duplicate what the power generation capacity of the United States is right now. That is not likely to happen, because wind will just be a part of the mix; it is not going to take over the world.

Senator Carper. In terms of what we should be doing in this country, in this body, to encourage the harnessing of wind energy, just, again, what further should we do?

Mr. Boyd. Well, I think I mentioned two things in my testimony. Number one is we have a wind production tax credit, which is very valuable to us in terms of getting our costs down.

Senator Carper. How would that work?

Mr. Boyd. For each kilowatt hour of wind energy, you get a tax credit of 1.5 cents. So this lowers the effective cost of wind energy when you sell it.

Senator Carper. Would that credit have had to have been higher 5 or 10 years ago, in order to make wind competitive?

Mr. Boyd. I am sorry, the question again?

Senator Carper. Would that credit have had to have been higher 5 or 10 years ago, in order for wind to be competitive?

Mr. Boyd. Actually, the credit was in the Energy Policy Act of 1992. That is when it started. And there was a time where it went away, and then it was reinstated. And it could have been higher. I think it would have been helpful if it was higher at the time. But, looking at the other side, I think that the technology had time to catch up with the market. So I do not think that it hurt us that badly.

Senator Carper. Okay. Thank you.

Anybody else want to comment in response to any of the questions I asked Mr. Boyd?

Mr. Starrs. I would just like to mention one issue that has not really come up much, Senator Carper, and that is that, as Senator Dorgan mentioned, there may be reasons to encourage or discourage certain technologies. And one of the things that we have not really emphasized adequately, I think, is the importance of fuel diversity.

Although we have somewhat diverse electricity resource base in this country today, the fact is that almost all of the new generating capacity coming on line is fueled by natural gas. And I think the evidence from the last 6 months or so adequately illustrates the fact that natural gas prices and other fossil fuel prices can be highly volatile.

And one of the reasons that I think it does make good public policy sense to encourage the development of renewable technology, such as solar and wind energy, is that they are really immune from those sorts of supply price volatility issues. And even if they are at the margin incrementally more expensive--and as we have already heard, wind may not be. But even if they are, I think there is a strong public interest in encouraging the broader diversification of our energy resource base.

Senator Carper. Thank you.

Now for the primer for me. Probably everybody in the room, Mr. Chairman, understands what these fellows were talking about when they talked about interconnection standards and distributed generating facilities and net metering policies. I may be the only person who does not fully understand those terms.

But for my benefit, alone perhaps, for my benefit alone, give me a primer on what we mean by interconnection standards. How are they relevant to this discussion? What should I understand about them, distributed generating facilities and net metering policies, those three?

Mr. Starrs. Mr. Carper, let me jump in because I actually had a bit of testimony that I did not get to address in this context. And I think I am going to explain by offering what I hope is a useful analogy to the telecommunications industry.

Twenty years ago, the telecommunications industry was a cumbersome, heavily regulated business dominated by regulated monopolies that had little appetite for innovation. Today, the telecom industry is highly competitive and highly innovative with consumers able to choose among a remarkable array of products from many different manufacturers. And one of the key elements in that transformation was overcoming the telephone utilities' traditional reluctance to allow competing companies to interconnect their equipment under fair and reasonable terms and conditions.

The same kind of transformation is happening in the electricity industry today. The traditional paradigm of large central station generating plants feeding a network of high voltage transmission lines and local distribution systems, which are all owned, have been owned, by a single vertically integrated company is changing.

And it is going to evolve in the coming decades to a complex web of interconnected facilities for the generation and storage of electricity that are owned by many different people, including residences, residential customers, and businesses, with the utilities role shifting to one of basically managing the flow of energy through the network.

I believe that this transition has the potential to provide substantial benefits for all Americans, including greater efficiency, more responsiveness, more resilience, and a more environmentally benign electricity system.

But probably the single biggest obstacle to that, to moving towards this new energy system, is the same reluctance on the utilities' part, except this time it is the electric

utilities, to integrate these facilities into their distribution networks. And that is the basis for our interest in having the Senate and the Congress address this issue of interconnection standards.

Senator Carper. That was helpful. That was helpful.

Mr. Hall.

Mr. Hall. If I could just add one additional element to that, which is that, unlike in the telecommunication debate, where there were not lots and lots of different companies that were controlling access to the distribution and transmission system in this case, the way that we have historically addressed interconnection, or those that wanted to interconnect, was a utility-by-utility activity.

And there are certainly many cases of utilities that have been very open and willing to allow people to interconnect where they saw that there was value for them. But there is just as many cases, if perhaps not more, where they felt that the ability to disagree or the perceived disagreement over technical elements of the physical interconnection were used to drive the costs up for people that wanted to connect such that it became uneconomic to go forward with that project. Senator Carper. Okay. Mr. Chairman, is there going to be another round for this panel, or is this it?

The Chairman. Well, we have two additional panels. And so I think this is it.

Senator Carper. All right. Thank you very much.

The Chairman. Senator Carper.

Senator Carper. Thank you, Mr. Chairman. Mr. Chairman, a number of years ago Mr. Craig and Mr. Thomas and Mr. English and I worked together in the House of Representatives. We all served together for a number of years. And I just want to say welcome. It is great to see you, Glenn. And you had a reputation then for being clear thinking, plain spoken, get right to the point. And I'm pleased to say that he hasn't changed in that respect.

I'm a new member of this committee. I've been on it for all of about 14 days. And some of the people that have already served here have forgotten more than I'm likely to ever know. So I'm just struggling to come up to speed. I feel like somebody who's walked into a party about 11 o'clock at night and everybody else is three sheets to the wind and I'm trying to figure out where the bar is.

[Laughter.]

Senator Carper. It would be helpful for me--and just keep in mind I'm still trying to understand all of the acronyms that we're talking about here. But what would be helpful for me is for each of you to take a minute or so and with respect to interconnection standards, with respect to transmission capability and capacity, where do you agree. What we've got to figure out is how to develop some consensus here. And in those two areas especially, if you could just tell me where do you all agree in a way that would be helpful for us in formulating some bipartisan approach here.

Glenn.

Mr. English. If I could take a very quick crack at that, Senator. And let me just say I've always been struck by your wisdom and your candor, and I see that that hasn't changed and delighted that you're here. I think you've got an excellent view of what's taken place in the energy industry, let me also say, with the 14 days you've been here.

Very quickly this. I don't think that you have to choose. I don't think that you have to choose. Let's have a little competition. Isn't this what this is all about? We talk about competition in the electric utility industry. We've got incentive pricing that's already available to the Federal Energy Regulatory Commission. Let's give them the other option of reducing risk, then let's let them make the choice.

Let's go even beyond that. We're talking about joint planning groups, we're talking about RTOs. Let's let them get into this act and decide what's best in their region. You know, we wholeheartedly agree that we need to bring all the interested parties together in an RTO or whatever else you want to call it for that region, and let them make the decision.

Let them play the role and identify what portion of the transmission system within that region that truly should be a part of an interstate system. And then let's let them say here's the best way to link it up with neighboring systems as a part of the grid. And then let's give the Federal Energy Regulatory Commission the authority then to say yes, that makes sense. We agree with that, and give their blessings. And we move on and we go to a competitive process, and let's see which way this thing goes out.

What we're suggesting to you is if you can reduce the risk, if you can do that by in fact guaranteeing the return and by the very nature that any of this new construction that's taking place or any upgrades that are taking place in the transmission system. In fact, if that's a part of an interstate system, you're going to have the traffic to get the return. And that's what you're really telling the investors, you're going to be guaranteed that return. And then let's stretch it over an extended period of time, and say 30, 35 years.

We've been in the construction and transmission business for some time. That's normally what our--we've got a record on that kind of stuff. We're not interested in getting in and building transmission, by the way, if you're looking at this as the electric co-op way of approaching it. What we're really interested in is making sure that we have low cost transmissions, you're able to move power. So if you're going to have competition and make some sense in this country, the transmission system in itself is a conveyance, just like the interstate highway system. And we're not interested in adding more toll booths, we're not interested in adding a lot of unnecessary cost. Let's make this as least costly as we can for the American people.

But we're not saying hey, let's exclude the whole opportunity to have incentive pricing. If FERC comes to the conclusion that's what they need, give them that chance. But let's give them both opportunities. That's all we're asking.

Mr. Rowe. Senator, I believe that----

Senator Carper. Let me just say something. I've heard a lot of people testify over the years. I really like the way that you speak slowly. No kidding, it's just----

Mr. Rowe. My wife says I follow my mother in that respect and it has little to do with learning.

Senator Carper. Give your mom our best if she's still around.

[Laughter.]

Mr. Rowe. I think there are three large issues on which those at this table and those who govern us fundamentally agree. We need more supplies of energy, we need them to be cleaner and consistently so, and we need the energy to be used efficiently. I believe that around those principles detailed legislation can be hammered.

I think those at this table agree on the importance of reliability standards for the regional transmission organizations and for people who are participating in the supply marketplace. I believe we agree on the importance of regional transmission organizations. I believe we agree on the fundamental principles of open access. Those are the--about the furthestest (sic) list we all probably agree on, but with a little work you can get some more out of us.

Senator Carper. Good. Okay. Thank you, Mr. Rowe.

Please.

Mr. Thilly. I agree with what Mr. Rowe just said. I think that's very accurate. There are differences obviously, the one that has been identified this morning on incentive rates. And, you know, maybe if we step back from that one, I agree with Mr. English.

The FERC has authority to set transmission rates and can do a number of things, but it has to be just and reasonable within the Federal Power Act. If we're talking and if an incentive is just and reasonable, then we already have the authority to do it. It's going beyond that to authorize incentives that would not pass the just and reasonable test that we have very significant problems with.

Mr. Ayers. I would also agree with Mr. Rowe's comments. I think that's a good, accurate summary.

I would like to add with respect to you mentioned interconnection requirements; that I would hope that everyone would agree here that the current process for interconnection and the ability for new powerplants to connect to the grid is a time frame that does not work. Just to give you an example of a recent experience we've had, in a process that should take 120 to 180 days, this process took over 600 days to negotiate and place the necessary requirements to interconnect to the grid. And clearly I think that is not a process that is going to allow new generation to be built and come on line in this country.

And so with respect to that, I think that is clearly an area I would hope most people would agree we need some different standards. Maybe there may be open issues on what those are, but the current process doesn't work.

On transmission, I think I would support all of Mr. Rowe's comments.

Senator Carper. All right, good. Well, thank you. Thank you all very much.

The Chairman. Thank you very much.

Senator Thomas. Well, we already have regions pretty much established. That's not a new idea. But we need to move, be able to move it.

Mr. English, would you support a system that's a third party operator with the funding coming back from bonding or whatever by people who pay to get on, and everyone pays the same rate and so on?

Mr. English. I think there's merit in that, in the concept. As having--as Senator Craig and you and Senator Carper and I have worked in the other body for many years, I'm also very sensitive and aware of the politics. That obviously becomes a great deal more difficult politically.